

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): Axial piston compressor with a drive shaft (12) for a disc (14) that is mounted on the drive shaft in such a way that it can be tilted relative to the drive shaft about a pivotal axis (C), and at least one piston (18), wherein the pivotal axis (C) of the disc (14) is disposed eccentrically with respect to the mid-plane of the disc,

characterized in that the piston (18) is provided with at least two sliding blocks (20) that move ~~along the disc (14)~~ axially on a slideway, arranged such that the piston (18) encloses the sliding blocks (20) in a C-shaped structure, and that the position of the pivotal axis (C) relative to the mid-plane of the disc is on the side that faces the ~~the~~ piston (18), so that the disc (14) can be ~~moved~~ independently tilted relative to the sliding blocks (20) in such a way that the slideway of the sliding blocks projects beyond the ~~the~~ edge of the disc only slightly or not at all whereby a constant pivotal axis is defined for the disc.

Claim 2 (original): Axial piston compressor according to Claim 1, characterized in that the disc is a swash plate (14), which can be set into rotation by the drive shaft (12) and can be adjusted to various tilt angles ( $\alpha$ ) with respect to the drive shaft.

Claim 3 (cancelled)

Claim 4 (previously presented): Axial piston compressor according to claim 1,

characterized in that, given a distance of 30 mm between the long axis (L) of the drive shaft and the long axis (Z) of the piston, an 8-mm diameter of the flat surface (22) of the sliding blocks (20), which is opposed to the slideway, and a maximal tilt angle ( $\alpha$ )

of  $18^\circ$  between the long axis of the drive shaft and the central axis of the disc, the distance between the mid-plane of the disc and the pivotal axis of the disc (14) is no greater than about 1 mm.

Claim 5 (cancelled)

Claim 6 (previously presented): Axial compressor according to claim 2, characterized in that, given a distance of 30 mm between the long axis (L) of the drive shaft and the long axis (Z) of the piston, an 8-mm diameter of the flat surface (22) of the sliding blocks (20), which is opposed to the slideway, and a maximal tilt angle ( $\alpha$ ) of  $18^\circ$  between the long axis of the drive shaft and the central axis of the disc, the distance between the mid-plane of the disc and the pivotal axis of the disc (14) is no greater than about 1 mm.

Claim 7 (new): Axial piston compressor with a drive shaft (12) for a disc (14) that is mounted on the drive shaft in such a way that it can be tilted relative to the drive shaft about a pivotal axis (C), and at least one piston (18), wherein the pivotal axis (C) of the disc (14) is disposed eccentrically with respect to the mid-plane of the disc, characterized in that the piston (18) is provided with at least two sliding blocks (20) that move the disc (14) axially on a slideway, arranged such that the piston (18) encloses the sliding blocks (20) in a C-shaped structure, and that the position of the pivotal axis (C) relative to the mid-plane of the disc is on the side that faces the piston (18), so that the disc (14) can be independently tilted relative to the sliding blocks (20) in such a way that the slideway of the sliding blocks projects beyond the edge of the disc only slightly or not at all whereby a constant pivotal axis is defined for the disc, and given a distance of 30 mm between the long axis (L) of the drive shaft and the long axis (Z) of the piston, an 8-mm diameter of the flat surface (22) of the sliding blocks (20), which is opposed to the slideway, and a maximal tilt angle ( $\alpha$ ) of  $18^\circ$  between the long axis of the

drive shaft and the central axis of the disc, the distance between the mid-plane of the disc and the pivotal axis of the disc (14) is no greater than about 1 mm.

Claim 8 (new): Axial piston compressor with a drive shaft (12) for a disc (14) that is mounted on the drive shaft in such a way that it can be tilted relative to the drive shaft about a pivotal axis (C), and at least one piston (18), wherein the pivotal axis (C) of the disc (14) is disposed eccentrically with respect to the mid-plane of the disc, characterized in that the piston (18) is provided with at least two sliding blocks (20) that move the disc (14) axially on a slideway, arranged such that the piston (18) encloses the sliding blocks (20) in a C-shaped structure, and that the position of the pivotal axis (C) relative to the mid-plane of the disc is on the side that faces the piston (18), so that the disc (14) can be independently tilted relative to the sliding blocks (20) in such a way that the slideway of the sliding blocks projects beyond the edge of the disc only slightly or not at all whereby a constant pivotal axis is defined for the disc, given a distance of 30 mm between the long axis (L) of the drive shaft and the long axis (Z) of the piston, an 8-mm diameter of the flat surface (22) of the sliding blocks (20), which is opposed to the slideway, and a maximal tilt angle ( $\alpha$ ) of 18° between the long axis of the drive shaft and the central axis of the disc, the distance between the mid-plane of the disc and the pivotal axis of the disc (14) is no greater than about 1 mm.